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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,926	04/06/2007	Masataka Fukuda	12400-077	1889
757 7590 01/05/2009 BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610				
EXAMINER				
ENGLISH, JAMES A				
ART UNIT		PAPER NUMBER		
3616				
MAIL DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/581,926

**Applicant(s)**

FUKUDA ET AL.

**Examiner**

James English

**Art Unit**

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 07 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-857)  
Paper No(s)/Mail Date 03/18/2008, 03/23/2007 and 06/07/2006.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_



**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

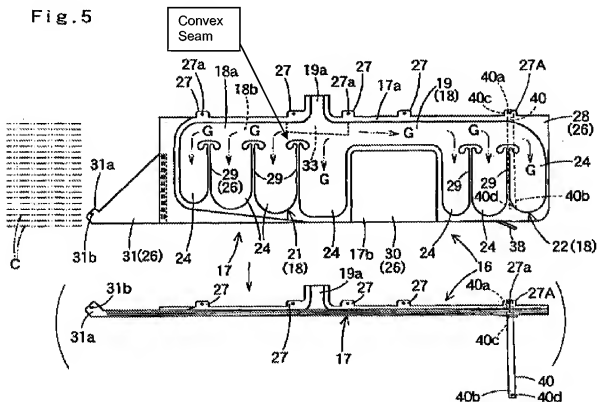
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogata (US Patent No. 6,866,293 B2) in view of Ikeda et al. (US Patent No. 6,811,184 B2).

With respect to claim 1, Ogata discloses a side airbag (16) having an interior part by joining mutually facing fabric layers (col. 6, lines 8-9), a gas generator (46) having an insertion end (19a) which is inserted into and disposed within a gas guide (19) of the airbag (16) configured to direct the flow of gas from the gas generator (46) to airbag (16) (Figs. 1, 5, col. 8, lines 58-62), the gas guide (19) including a gas guide member (33) having an attachment orifice (34) into which the insertion end (19a) of the gas generator (46) is inserted, and gas injection nozzles (35a, 35b) facing the interior of the airbag (17) (Figs. 1, 5-6, col. 7, lines 36-55), and a convex seam (Modified Fig 5 – below) formed by a mutually joined part of the fabric layers, the convex seam disposed in opposition to the gas guide member (Fig. 5, col. 6, lines 66-67 and col. 7, lines 1-7.) Ogata does not disclose the gas guide coming into contact with the convex seam. Ikeda et al. teaches that when gas flows into the airbag from the gas generator, the gas

guide member (35) comes into contact with the convex seam. (Figs. 3, 6, 12, col. 12, lines 38-48.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Ogata to have the gas guide member come into contact with the convex seam as described in Ikeda et al. to stabilize the outflow direction of the inflating gas into the airbag body. (Column 12, lines 52-53.)

Fig. 5



With respect to claim 2, Ogata does not disclose the gas guide coming into contact with the convex seam. Ikeda et al. teaches of a gas guide member (35) that includes a gas discharge tube (38), gas injection nozzles (39, 40), and the gas discharge tube (38) comes into contact with the convex seam in response to the inflation of the airbag so as to change the direction of gas flow. (Figs. 3, 6 and 12, col. 12, lines 48-58.) It would have been obvious to one having ordinary skill in the art at the

time the invention was made to modify the invention of Ogata to have the gas guide member come into contact with the convex seam as described in Ikeda et al. to stabilize the outflow direction of the inflating gas into the airbag body. (Column 12, lines 52-53.)

With respect to claim 3, Ogata discloses at least one gas injection nozzle (35a) is formed over each side of a protrusion of the convex seam. (Fig. 5 and 6.)

With respect to claim 6, Ogata does not disclose the convex seam being 80-120% the width of the gas discharge tube. Ikeda et al. teaches of the width of the convex seam (19a) facing the gas guide member (23) is from 80-120% the width of the gas discharge tube (27) of the gas guide member (23). (Figs. 3, 6, 12.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Ogata to have the convex seam facing the gas guide member to be 80-120% the width of the gas discharge tube as described in Ikeda et al. to suppress downward motion of the gas guide member. (Column 12, lines 49-51.)

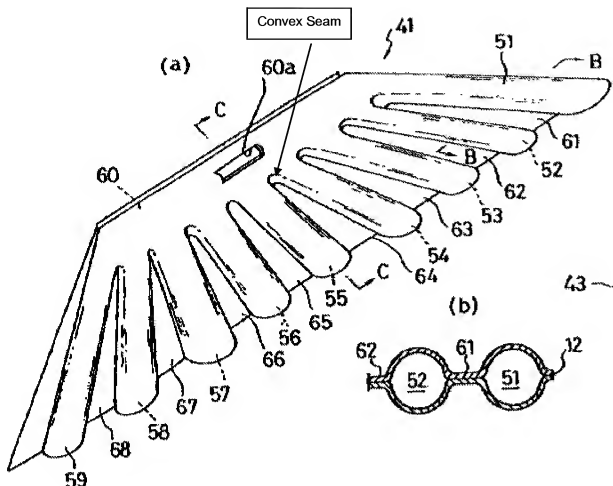
With respect to claim 7, Ogata does not disclose the clearance between the gas guide member and convex seam to be less than 20mm. Ikeda et al. teaches of the clearance between the gas guide member (35) and convex seam to be less than 20mm. (Figs. 3, 6, 12.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Ogata to have the clearance between the gas guide member and convex seam to be less than 20mm as described in Ikeda et al. to stabilize the outflow direction of the inflating gas into the airbag body. (Column 12, lines 52-53.)

With respect to claim 8, Ogata discloses the gas guide member (33) is made from an expandable material. (Col. 7, lines 39-40.)

With respect to claim 9, Ogata does not disclose the gas guide member elongating toward the convex seam. Ikeda et al. teaches of the flow of gas through the gas guide member (35) causing the member to elongate, in a direction toward the convex seam, a distance of at least 5mm greater than the clearance. (Col. 3, lines 14-22.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Ogata to have the gas guide member elongate toward the convex seam as described in Ikeda et al. to stabilize the outflow direction of the inflating gas into the airbag body. (Column 12, lines 52-53.)

3. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogata ('293) in view of Ikeda et al. ('184), as applied to claims 1-3 and 6-9 above, and further in view of Tanaka (US Patent 6,971,665).

With respect to claim 4, Ogata, as modified, does not disclose the convex seam as triangular in shape. Tanaka teaches as prior art a convex seam, approximately triangular in shape and the protrusion is disposed facing the gas guide member in close proximity. (Modified Fig. 6 – below.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Ogata to have the convex seam in a triangular shape as described in Tanaka to guide the gas from the inflator through the airbag body.



With respect to claim 5, Ogata discloses a convex seam with two inclined sides. (Fig. 5-6.) Ogata does not disclose the gas discharge nozzles coming into contact with the convex seam. Ikeda et al. discloses the gas discharge tube (38) coming into contact with a convex seam during inflation. (Fig. 3, 6, 12, col. 12, lines 48-58.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Ogata to have the gas guide member come into contact with the convex seam and straddle the two inclined sides as described in Ikeda et al. to stabilize the outflow direction of the inflating gas into the airbag body. (Column 12, lines 52-53.)



***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references Inoue (US Pub. No 2003/0230878 A1) and Ender (US Patent No. 6,846,010 B2) disclose a gas guide facing a convex seam. The reference Gammill (US Patent No. 7,125,038 B2) discloses triangular shaped seams in a side airbag. The reference Kumagai et al. (US Patent No. 7,021,652 B2) has a gas guide that straddles a dividing seam.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James English whose telephone number is (571)270-7014. The examiner can normally be reached on Monday - Thursday, 7:00 - 5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Q. Nguyen can be reached on (571)272-6952. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Q. Nguyen/  
Supervisory Patent Examiner, Art Unit 3616

/James English/  
Examiner, Art Unit 3616